Sand Creek (Ref. 18, pp. 3, 4; Table 9 of this HRS documentation record).

Leaded tank bottoms are specifically listed as RCRA K052 waste and are CERCLA hazardous substances (Ref. 14, pp.1-8). In the definition of hazardous substances, Section101(14) of CERCLA provides that "[t]he term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as hazardous substance under subparagraph (A) through (F) of this paragraph…". This provision has been termed the "petroleum exclusion". In the EPA General Counsel's Opinion *Scope of the CERCLA Petroleum Exclusion under Sections 101(14) and 104(a) (2)* (July 31, 1987), the EPA interprets the petroleum exclusion to include hazardous substances such as benzene and toluene, which are "indigenous" to petroleum products. The petroleum exclusion also includes "refinery-added" hazardous substances that are normally mixed with or added to crude oil or crude oil fraction during the refining process. Conversely, "contaminants" found in petroleum or petroleum products do not fall within the petroleum exclusion. "Contaminants" include substances which are not indigenous to petroleum products or which are present at levels that exceed those normally found in petroleum products (Ref. 14, pp.1-8).

In its decision in *US v. Western Processing* (1991), the federal district court concluded that "tank bottom sludge is a contaminated waste product, and not a petroleum fraction, as that term is used in [CERCLA]." In so ruling, the court focused in part on the tank bottom's status as "waste" in contrast to a useful petroleum product, which would be considered a petroleum fraction under CERCLA (Ref. 36, pp. 1-10). In *Cose v. Getty Oil* (1993), the U.S. 9th Circuit of Appeals concluded "crude oil tank bottoms are never 'subjected to various refining processes'; as required by our 'petroleum' definition. Moreover, such tank bottoms are not used 'for producing useful products'…" and "crude oil tank bottoms do not fall within CERCLA's exclusion of 'petroleum', including crude oil or a fraction thereof" (Ref. 37, pp. 1-9). In addition, the circuit court of appeals also found it unnecessary to determine whether the level of lead in the refinery sludge exceeded levels indigenous to petroleum products such as leaded gasoline (Ref. 32, pp. 1-11).

A summary of sampling activities conducted at the facility is provided in Table 1: